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Remarks

Claims 1-15 were pending in the application. Claims 1-15 were rejected. No claims were merely objected to and no claims were allowed. By the foregoing amendment, no claims are canceled, claims 1, 8, and 14 are amended, and claims 16-20 are added. No new matter is presented.

Claim Rejections-35 U.S.C. 112

Claim 14 was rejected under 35 U.S.C. 112(2). The examiner asserted "it is not clear whether 3 or 4 of the mold sections are claimed." Applicants assert that the previously-identified "3-4" is clear in meaning 3 or 4 (i.e., but not fewer than 3 or greater than 4). However, by the foregoing amendment, the claim has been amended to alternatively express this.

Claim Rejections-35 U.S.C. 102

Claims 1, 2, 4, and 8-10 were rejected under 35 U.S.C. 102(b) as being anticipated by either Blazek (US 4,702,298) or Blazek et al. (US 4,170,256 or 4,066,116). Applicants respectfully traverse the rejection.

The preamble of independent claim 1 identifies a "method for casting a plurality of blades having an airfoil and a root for securing the blade to a disk..." The '298 patent discloses the manufacture of "[c]ircular turbine engine components..." Col. 1, line 19. The '116 patent discloses "the casting of a one piece jet engine fan frame..." Col. 1, lines 27-28. The '256 patent is directed to an integrally cast hub and vane combination. Col. 1, lines 25-29. None disclose the forming of separate blades or other components. Claim 1 is amended to add "separately-formed" before "disk" to more clearly distinguish the references in that: (1) generally, the references involve a single cast piece; and (2) specifically, the references only involve airfoil elements (whether identified as blades or vanes) unitarily cast with the disk as said single piece. This amendment is supported by the paragraph 0016 of the present application (0018 as numbered in PGpub. 2005/0045301 which added paragraph numbers for two sub-headings) identification of a "blade mounting root" of FIG. 1.

Independent claim 8 lacks such a preamble. The second line of claim 8 is amended to read "forming a plurality of mold sections, each section having internal surfaces forming one or

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more separate ones of said parts;" to similarly overcome the rejection based upon the separateness. This is further supported by paragraph 0024/26 of the application/publication.

Claims Rejections-35 U.S.C. 103

Claims 3, 5-7, and 11-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over the previously cited patents. Applicants respectfully traverse the rejection.

The rejections of claims 3, 5-7, 11, and 12 are overcome for the same reasons noted above. The references fail to suggest the forming of multiple blades or other parts.

Independent claim 13 is directed to a mold assembly. Even without amendment, the claim references filters in the feeder conduits. No specific citation has been made for this or for several others of the assertions made at the paragraph numbered 6 on the page numbered 3 of the Office action. Claim 13 has further been amended to identify that the manifold pour chamber and feeder conduits are formed in a single piece (see also claim 20 noted below). Support for this is found at paragraph 0019/21 of the application/publication and FIG. 6. Although filter usage is known in the art, there is no suggestion for the claimed filter location in a unitary manifold body.

New dependent claim 16 identifies a single centrally located chamber. Support for this is found at paragraph 0021/23 of the application/publication. There is no suggestion for this.

New dependent claim 17 identifies the conduits adjacent the filters as dimensioned to provide a metering function. Support for this is found at paragraph 0020/22 of the application/publication. There is no suggestion for this.

New dependent claim 18 identifies distal portions of the manifold branch portions extending into upper ends of feeding passageways in the mold sections. Support for this is found at paragraph 0021/23 of the application/publication. There is no suggestion for this.

New independent claim 19 is supported by claim 13 with the referenced amendment to claim 8. There is no suggestion for this.

New independent claim 20 is supported by claim 13 with reference to there being but a single pour chamber and a unitarily-formed manifold body. There is no suggestion for this.

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Accordingly, Applicants submit that claims 1-20 are in condition for allowance. Please charge any fees or deficiency or credit any overpayment to our Deposit Account of record.

Respectfully submitted,

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I hereby certify that this correspondence is being faxed this 23rd day of May, 2005 to the USPTO, at Fax No. 1-703-872-9306.


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